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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/009,345

03/11/2002

Bernhard Wurnitzer

016915-0253

3871

22428

7590

03/29/2004

FOLEY AND LARDNER

SUITE 500

3000 K STREET NW

WASHINGTON, DC 20007

EXAMINER

LE, UYEN CHAU N

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/009,345

Applicant(s)

WIRNITZER ET AL.

Examiner

Uyen-Chau N. Le

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>121001</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Prelim. Amdt/Amendment***

2. Receipt is acknowledged of the Preliminary Amendment filed 10 December 2001.

### ***Specification***

3. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### ***Claim Objections***

4. Claims 1-6, 10-11 and 14-16 are objected to because of the following informalities:  
  
Re claim 1, line 1: Substitute "the decoding" with -- decoding --.  
  
Re claim 1, line 3: Substitute "said data tape" with -- data tape --.  
  
Re claim 1, line 5: Substitute "the relative position" with -- a relative position --.  
  
Re claim 1, line 6: Substitute "the fields" with -- fields --.  
  
Re claim 1, line 6: Substitute "the sensor" with -- a sensor --.  
  
Re claim 1, line 6: Substitute "the position" with -- a position --.  
  
Re claim 1, line 8: Substitute "the relative position" with -- a relative position --.

Re claim 1, line 8: Substitute “the edges” with -- cells edges --.

Re claim 1, line 9: Substitute “the sensor signals” with -- sensor signals --.

Re claim 1, line 9: Substitute “the sensor fields” with -- sensor fields --.

Re claim 2, line 2: Substitute “the sensor signal” with -- a sensor signal --.

Re claim 3, line 2: Substitute “the sensor signal” with -- a sensor signal --.

Re claim 4, line 2: Substitute “a cell” with -- the cell --.

Re claim 5, line 1: Substitute “the encoded” with -- an encoded--.

Re claim 6, line 3: Substitute “the respective dimensions” with -- respective dimensions --.

Re claims 10 and 14-16, lines 2-3: Substitute “the latter the position” with -- a latter position --.

Re claims 10 and 14-16, line 3: Substitute “the sensor coordinate” with -- a sensor coordinate --.

Re claims 10 and 14-16, line 3: Substitute “its” with -- the cell’s --.

Re claim 11, line 5: Substitute “the difference” with -- a difference --.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuboi et al (US 5,550,640).

Re claims 1-6, Tsuboi et al discloses a method for synchronization in decoding of information stored on data tapes (e.g., magnetic tape 5) having a high data density (i.e., compression), in cells

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positioned two-dimensionally (col. 6, lines 20+) on the data tape 5, using a surface or line sensor, characterized in that a specification is established describing a relative position of fields of a sensor in relation to a position the cells (figs. 6A-6D; col. 8, lines 3+); the specification is continuously corrected in both dimensions using a relative position of inner structures of the cells (e.g., macroblocks) (col. 11, lines 33+); the information content of a cell is determined by a sensor signal of a sensor field/a plurality of sensor fields (e.g., frame(s)) to be selected on the basis of the specification (col. 12, lines 44+); the characteristic patterns comprises colors which appear in different degrees of brightness to the sensor (col. 8, lines 15+); the device comprises a decoding circuit 19, a memory 52 for storing data, a control means 21 (fig. 5; col. 11, line 23 through col. 12, line 20).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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9. Claims 4-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuboi et al in view of Wang (US 5,481,103). The teachings of Tsuboi et al have been discussed above.

Tsuboi et al have been discussed above but fail to teach or fairly suggest that two-dimensional synchronous information is integrated into the inner structure of the cells.

Wang teaches a packet codes having a 2-D bar code encoded therein (col. 5, lines 5-66), each cell/block comprises a plurality of data bits (col. 6, lines 15+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Wang into the system as taught by Tsuboi et al in order to provide Tsuboi with a greater capacity of information in a coding area (i.e., 2-D barcode permit the encoding of a large amount of information in a relatively small area), and thus an obvious expedient.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents to Rentsch (US 5,541,396); Batterman et al (US 5,189,292); Yoshida (US 5,343,031); Matsumi et al (US 5,317,457); Iida (US 4,573,084); Priddy et al (US 4,939,354) are cited as of interest and illustrate a similar structure to an apparatus and system of METHOD AND DEVICE FOR SYNCHRONISATION IN THE ENCODING AND DECODING OF DATA THAT ARE PRINTED IN DATA TAPES.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on MON, TUES AND THURS-SAT 5:30-2:00.

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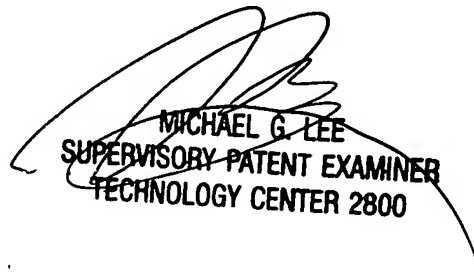
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



*Uyen-Chau N. Le*

March 21, 2004



MICHAEL G. LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800